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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,408	06/23/2003	Paul W. Dent	4015-5139	1668
24112	7590	02/09/2007	EXAMINER	
COATS & BENNETT, PLLC 1400 Crescent Green, Suite 300 Cary, NC 27518			JOSEPH, JAISON	
			ART UNIT	PAPER NUMBER
			2611	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/09/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/602,408	DENT, PAUL W.
	<b>Examiner</b>	<b>Art Unit</b>
	Jaison Joseph	2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 23 June 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-15 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Preliminary amendment filed on 06/23/2006 indicates to cancel claims 29 –54, 56 – 62 and add claims 1 – 15. However, there are no records of claims 29 – 62. If applicant had filed claims 29 –62, applicant should renumber the new claims 63 – 77, instead of 1 -15. The only prior claims on the record are claims 1 –28. USPTO record of Complete Marked Up Copy of Claims contains only claims 1- 15.

### ***Information Disclosure Statement***

The information disclosure statement filed 06/23/2003 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information

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disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

### ***Specification***

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

Claim 13 is objected to because of the following informalities: claim 13, line 1 recite "base station of claim 2" should have been "the base station of claim 11". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 7 and 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 7 recite the limitation Claim 7 recite the

limitation "said paging and traffic frames comprise 16 slots". However present specification describes the traffic channel comprise 16 slots however the paging channel comprise only 10 slots (see paragraphs 26 –27). Therefore it is not understood how the paging channels divided into 16 slots. Clarification is required.

Claim 8 is inherently rejected as being depended on above rejected claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugita (US Patent 5,699,380) in view of Shea et al (US Patent 5,809,061).

Regarding claim 1, Sugita teaches a method for transmitting a Code Division Multiple Access signal comprising: transmitting paging information having a repetitive frame structure on a given frequency using a first spread-spectrum access code, said paging information being used to address specific receivers; transmitting traffic information to individual receivers on said same given frequency using one of a set of second spread spectrum access codes assigned to each receiver, said traffic transmissions overlapping in time with said paging information; and periodically transmitting a signal with a periodicity related to said repetitive frame structure (see Figure 1 and column 1, lines 14 - 55). Sugita does not expressly specify the periodic

signal is band is narrower then the paging and the traffic channels. However in analogous art Shea et al teach a CDMA communication system with narrow periodic signal (see column 7, lines 6 – 10). Therefore it would be obvious to an ordinary skilled in the art at the time the invention was made to use narrower periodic signal channel (pilot) in Sugita's communication system to benefit from low noise and interference in the pilot channel.

Regarding claim 2, Sugita further teaches the periodic signal further comprises the step of: transmitting a burst of unmodulated, continuous wave energy (see column 1, lines 48 – 53).

Regarding claim 3, Sugita further teaches said unmodulated burst comprises a sequence of chips set to the same value (see column 1, lines 48 – 53).

Regarding claim 4, Sugita further teaches wherein said unmodulated burst comprises a sequence of chips set to a systematically phase-rotating value.

Regarding claim 5, Sugita further teaches wherein said periodicity is once per frame.

Regarding claim 6, Sugita further teaches wherein said periodicity has a sliding time relationship with said frame structure.

Regarding claim 9, the claimed device including the features that corresponds with subject matter mentioned above in the rejection of claim 1 is applicable hereto.

Regarding claim 10, which inherits the limitations of claim 9, Sugita further teach said CDMA transmitter further operative to transmit additional traffic information encoded with additional spread-spectrum access codes, said additional traffic

information directed to others of said plurality of receivers (i.e. base station communicate with plurality of mobile station).

Regarding claim 11, which inherits the limitation of claim 9, the claimed device including the features that corresponds with subject matter mentioned above in the rejection of claim 2 is applicable hereto.

Regarding claim 12, which inherits the limitation of claim 11, the claimed device including the features that corresponds with subject matter mentioned above in the rejection of claim 3 is applicable hereto.

Regarding claim 13, which inherits the limitation of claim 12, the claimed device including the features that corresponds with subject matter mentioned above in the rejection of claim 4 is applicable hereto.

Regarding claim 14, which inherits the limitation of claim 9, the claimed device including the features that corresponds with subject matter mentioned above in the rejection of claim 5 is applicable hereto.

Regarding claim 15, which inherits the limitation of claim 9, the claimed device including the features that corresponds with subject matter mentioned above in the rejection of claim 6 is applicable hereto.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaison Joseph whose telephone number is (571) 272-6041. The examiner can normally be reached on M-F 9:30 - 6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jaison Joseph  
02/01/2006

  
CHIEH M. FAN  
SUPERVISORY PATENT EXAMINER